UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------|----------------------------------|----------------------|--|------------------|
| 10/585,403 | 01/19/2007 | Hyun-Wook Kim | 4900-06085832 | 2761 |
| | 7590 05/20/201 MAN HAM & BERN | | 4900-06085832 2761 EXAMINER SARWAR, BABAR ART UNIT PAPER NUMBER 2617 | IINER |
| 1700 DIAGONAL ROAD | | | SARWAR, BABAR | |
| SUITE 300 ALEXANDRIA | A, VA 22314 | | ART UNIT PAPER NUMBER | |
| | | | 2617 | |
| | | | | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 05/20/2010 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | |
|--|---|--|------|
| | 10/585,403 | KIM ET AL. | |
| Office Action Summary | Examiner | Art Unit | |
| | BABAR SARWAR | 2617 | |
| The MAILING DATE of this communication a | ppears on the cover sheet w | th the correspondence address | |
| Period for Reply | | | |
| A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory perion. - Failure to reply within the set or extended period for reply will, by stat Any reply received by the Office later than three months after the main earned patent term adjustment. See 37 CFR 1.704(b). | DATE OF THIS COMMUNION 1.136(a). In no event, however, may a root will apply and will expire SIX (6) MON tute, cause the application to become AE | CATION. eply be timely filed THS from the mailing date of this communication ANDONED (35 U.S.C. § 133). | |
| Status | | | |
| 1) ■ Responsive to communication(s) filed on 23 2a) ■ This action is FINAL . 2b) ■ The 3 ■ Since this application is in condition for allow closed in accordance with the practice under the second secon | nis action is non-final. vance except for formal matt | | is |
| Disposition of Claims | | | |
| 4) Claim(s) 1-12 is/are pending in the application 4a) Of the above claim(s) is/are withd 5) Claim(s) is/are allowed. 6) Claim(s) 1-12 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and | rawn from consideration. | | |
| Application Papers | | | |
| 9) The specification is objected to by the Exami 10) The drawing(s) filed on is/are: a) a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the | ccepted or b) objected to ne drawing(s) be held in abeyar ection is required if the drawing | ce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.121 | (d). |
| Priority under 35 U.S.C. § 119 | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a li | ents have been received. ents have been received in A riority documents have been eau (PCT Rule 17.2(a)). | pplication No received in this National Stage | |
| Attachment(s) | " □ | (PTO 442) | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | Paper No(s | tummary (PTO-413) s)/Mail Date nformal Patent Application | |

Art Unit: 2617

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed in the 02/23/2010 remarks with respect to the rejection of claims 1-12 under a statutory type (35 U.S.C. 101) double patenting rejection have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground of rejection is made in view of a nonstatutory obviousness-type double patenting rejection.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

Art Unit: 2617

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-12 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 7,664,074 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because all the claimed limitations recited in the present application are transparently found in the U.S. Patent No. 7,664,074 B2 with obvious wording variations. Take an example of comparing claims 1 and 4 of pending application and claim 1 of the U.S. Patent No. 7,664,074 B2.

Pending Application 10/585403 U.S. Patent No. 7,664,074 B2 1. A handover method for providing a packet data service to a dual-band dual-mode mobile communication terminal having an asynchronous modem unit and a synchronous modem unit in a mobile communication network in which asynchronous and synchronous model mobile communication network in which asynchronous and synchronous mobile mode communication terminal being provided with an

Application/Control Number: 10/585,403

Art Unit: 2617

communication systems coexist, the method comprising: the first step of, as the mobile communication terminal in a dormant state with respect to the asynchronous mobile communication system moves into an area of the synchronous mobile communication system, a Serving General packet radio service (GPRS) Support Node (SGSN)/Gateway GPRS Support Node (GGSN) of the asynchronous mobile communication system receiving information indicating that handover is required; the second step of the SGSN/GGSN commanding a base station of the synchronous mobile communication system to perform handover; the third step of the mobile communication terminal attempting to originate a call to the base station, thus executing call processing and channel assignment between the base station and a mobile switching center of the synchronous mobile communication system; the fourth step of performing a negotiation related to call processing and setup between the mobile communication terminal and the base station; the fifth step of the synchronous mobile communication system setting up a trunk; the sixth step of initializing a radio link protocol between the mobile communication terminal and the base station; the

asynchronous modem unit and a synchronous modem unit, the asynchronous mobile communication system having a Gateway General packet radio service (GPRS) Support Node (GGSN) being connected to a packet data service node of the synchronous mobile communication system, the handover method comprising; the first step of, as the mobile communication terminal that is connected to the asynchronous mobile communication system and uses the packet data service moves into an area of the synchronous mobile communication system, and a handover event occurs, a node B of the asynchronous mobile communication system notifying a Serving GPRS Support Node (SGSN)/GGSN of the asynchronous mobile communication system that handover is required; the second step of the SGSN/GGSN requesting a mobile switching center of the synchronous mobile communication system to perform handover, and the synchronous mobile switching center requesting a base station of the synchronous mobile communication system to perform handover; the third step of the synchronous mobile communication system performing a procedure of setting control signals and traffic for transmission of packet data; the fourth step of the base station notifying the mobile switching center that handover has been completed and assigning a forward

Application/Control Number: 10/585,403

Art Unit: 2617

seventh step of the base station notifying the mobile switching center that channel assignment has been completed; the eighth step of setting up a packet data call between the mobile communication terminal and a packet data service node of the synchronous mobile communication system; and **the ninth step** of the synchronous mobile communication system assigning a mobile IP to the mobile communication terminal.

4. The handover method according to claim 1, wherein a message, including the handover command transmitted by the SGSN/GGSN to the mobile communication terminal at the second step, includes channel assignment information and traffic channel entry information.

channel to the mobile communication terminal; the fifth step of the mobile switching center notifying the SGSN/GGSN that handover has been completed; the sixth step of, as the SGSN/GGSN commands the node B to perform handover, the node B directing the mobile communication terminal to perform handover; the seventh step of performing assignment of a reverse channel between the mobile communication terminal and the synchronous mobile communication system, and the mobile communication terminal interfacing with the synchronous mobile communication system and notifying the base station that handover has been completed; the eighth step of the synchronous mobile communication system performing call setup for the packet data service; the ninth step of the base station notifying the synchronous mobile switching center that handover has been completed, and the mobile switching center notifying the SGSN/GGSN that handover has been completed; and the tenth step of the SGSN/GGSN requesting the node B to release a connection to the mobile communication terminal.

The claims of the instant application encompass the same subject matter except the instant "the ninth step of the synchronous mobile communication system assigning a mobile IP to the mobile communication terminal." whereas the U.S. Patent No. 7,664,074 B2 claims are to "the eighth step of

Art Unit: 2617

the synchronous mobile communication system performing call setup for the packet data service; the ninth step of the base station notifying the synchronous mobile switching center that handover has been completed, and the mobile switching center notifying the SGSN/GGSN that handover has been completed; and the tenth step of the SGSN/GGSN requesting the node B to release a connection to the mobile communication terminal." Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to implement the U.S. Patent No. 7,664,074 B2 "the eighth step of the synchronous mobile communication system performing call setup for the packet data service; the ninth step of the base station notifying the synchronous mobile switching center that handover has been completed, and the mobile switching center notifying the SGSN/GGSN that handover has been completed; and the tenth step of the SGSN/GGSN requesting the node B to release a connection to the mobile communication terminal." as a "the ninth step of the synchronous mobile communication system assigning a mobile IP to the mobile communication terminal." because it was vigorously well known to provide a handover process in a mobile IP network, exchanging messages for the handover process, and the resource assignment i.e. channel assignment to easily switch between service provider while minimizing resource utilization in a handover schemes.

Further, the instant claims obviously encompass the claimed invention of U.S. Patent No. 7,664,074 B2 and differ only in terminology. To the extent that the instant claims are broaden and therefore generic to the claimed invention of U.S. Patent No. U.S. Patent No. 7,664,074 B2, in re

Goodman 29 USPQ 2d 2010 CAFC 1993, states that a generic claim cannot be issued without a terminal disclaimer, if a species claim has been previously been claimed in a co-pending application.

Allowable Subject Matter

4. Upon filing a suitable Terminal Disclaimer and proper overcome of the **Double Patenting rejection** as discussed above, Claims 1-12 would be allowed.

Art Unit: 2617

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BABAR SARWAR whose telephone number is (571)270-5584. The examiner can normally be reached on MONDAY TO FRIDAY 09:00 A.M -05:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NICK CORSARO can be reached on (571)272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BABAR SARWAR/ Examiner, Art Unit 2617

/KAMRAN AFSHAR/

Primary Examiner, Art Unit 2617